



BGI Local Laboratory Solutions

Your Partner in Reproductive Genomics

Introduction

BGI is changing diagnostics by providing fast, affordable and comprehensive genetic knowledge.

Genetic disease raises many questions. We're empowering healthcare providers with the information they need to answer these questions, in order to both prevent disease and better guide patient treatment decisions.

With more than 5 years' experience in diagnostic testing and screening, and a worldwide network of offices and laboratories, BGI acts as one of the world's most tried and trusted clinical genomics partners.



Our Technology

BGISEQ-500 is an industry leading high-throughput sequencing solution, powered by combinatorial Probe-Anchor Synthesis (cPAS) and improved DNA Nanoballs (DNB) technology. The cPAS chemistry works by incorporating a fluorescent probe to a DNA anchor on the DNB, followed by high-resolution digital imaging. This combination of linear amplification and DNB technology reduces the error rate while enhancing the signal. In addition, the size of the DNB is controlled in such a way that only one DNB is bound per active site. This patterned array technology not only provides sequencing accuracy, but it also increases the chip utilization and sample density.

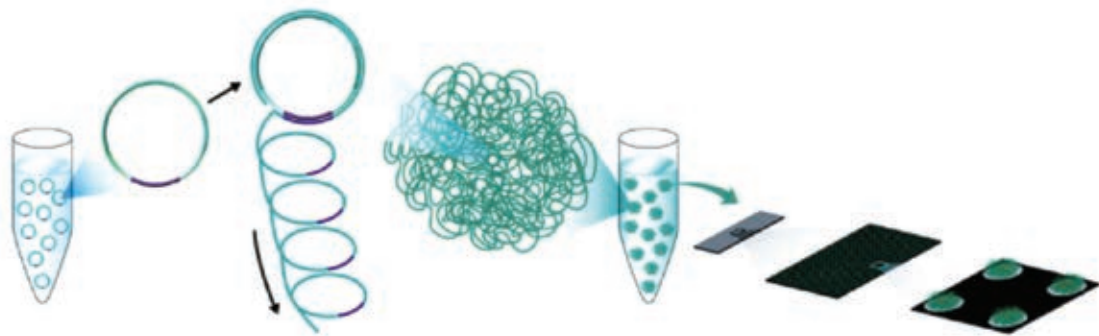


Fig. 1 - BGISEQ-500 DNA Nanoball Formation



A Trusted Local Solution for Non-invasive Prenatal Testing

Non-invasive prenatal testing (NIPT) has been proven superior to traditional screening methods for detecting common fetal aneuploidies. By reducing false positive rates, NIPT helps limit invasive procedures—and therefore, the risk of miscarriage—when used as a primary screen.

BGI has many years experience providing the NIFTY® Test to partners across the world, and has processed more than 2 million samples to date. As a trusted NIPT provider, we are proud to offer the next step in the evolution of NIPT testing by offering a local laboratory solution powered by our own proprietary sequencing platform, the BGISEQ-500.

One Comprehensive Workflow

The NIFTY® Local Lab Solution is an automated and validated workflow including CE-IVD–marked sample preparation and assay software. The solution provides results for up to 96 samples in under 3 days. From sample prep to sequencing to analysis, the NIFTY® Local Lab Solution streamlines your process as one comprehensive workflow.



SP-100
16 samples/run



DL-500
1/2 chip/run

SAMPLE PREPARATION

SAMPLE LOADING

Reagent Solutions

BGI produces specially designed kits for full preparation of samples. Kits are CE IVD certified. By producing kits itself, rather than relying on external suppliers, BGI can ensure quality and control costs, passing on savings to our customers.



Nucleic Acid Extraction Kit



Universal Reaction Kit
for Sequencing



Detection Kit for
Noninvasive Fetal Trisomy
(T21, T18, T13) Test



BGISEQ-500
48-192 samples/run

SEQUENCING



BGI-HALOS
3.5 hours/96 samples

DATA ANALYSIS AND REPORTING

Join Our Network

With **12 existing Local Laboratories** already established across the world, we are highly experienced and well equipped to bring our local lab solution to empower your business, wherever you are

In addition to on-site training and ongoing support, we offer webinars and courses at various global locations. We're here with all the resources you need to accelerate progress.

Together, we can empower informed reproductive choices and improve the future of genetic disease detection.



Workflow for Establishing NIFTY® Local Lab Solution

1. Preparation

- Laboratory design
- Environmental test
- Equipment and consumables list provided
- Installation of BGISEQ-500 System
- Reagent and pre-tested plasma preparation
- Technicians

2. On-site Training

- Site inspection
- Reagent performance test
- Training runs
- Parallel test
- Certification

3. Technical Support

- Irregular Software Upgrade
- Application support
- Field service
- FQA
- Flight check

Contact Us

Speak to your local BGI sales representative to learn more.

Email: info@bgi-international.com

Or visit www.bgi.com/global/ for more information.



The NIFTY® Local Lab Solution is an in vitro diagnostic test intended for use as a sequencing-based screening test for the detection of fetal aneuploidies from maternal peripheral whole blood samples in pregnant women of at least 10 weeks gestation. The test provides information regarding aneuploidy status for chromosomes 21, 18, 13, X, and Y. This product must NOT be used as the sole basis for diagnosis or other pregnancy management decisions.

Noninvasive prenatal testing (NIPT) based on cell-free DNA analysis from maternal blood is a screening test; it is not diagnostic. Test results must not be used as the sole basis for diagnosis. Further confirmatory testing is necessary prior to making any irreversible pregnancy decision.

Not available in all countries or regions.



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